

CLAIMS:

1. A self-contained, portable time and attendance recording apparatus, comprising:

a processor;

a data storage device connected to said processor;

a data input device connected to said processor, said data input device being adapted for entering attendance data by a person indicating the identity of said person and that said person is clocking into or out of a worksite, said data input device being further adapted for transmitting said attendance data to said processor;

a clock connected to said processor, said clock being adapted for providing the time and date of said entering to said processor;

a geographical locating device connected to said processor, said geographical locating device being adapted for providing the geographical location of said apparatus to said processor, said processor being adapted to store said attendance data and said time and date in said storage device and to associate said attendance data and said time and date with each other and with said geographical location as related data;

a data interface device adapted for transmitting said related data through a communication network to a computer on said network; and

a power source adapted to provide power to said processor, said data storage device, said data input device, said clock, said geographical locating device and said data interface.

2. An apparatus as in claim 1, further comprising a biometric-capture device connected to said processor, said biometric-capture device being adapted for capturing a

biometric characteristic of said person, said processor being further adapted for associating said biometric characteristic with said related data and said data interface device being further adapted for transmitting said biometric characteristic with said related data through said communication network to said computer.

3. An apparatus as in claim 2, wherein said biometric-capture device comprises a digital camera and said biometric characteristic is a visual image of said person.

4. An apparatus as in claim 1, wherein said data storage device is adapted for storing indicia identifying said worksite and a company employing said person, said processor is adapted for associating said indicia with said related data and said data interface device is adapted for transmitting said indicia with said related data through said communication network to said computer.

5. An apparatus as in claim 1, wherein said processor is further adapted for initiating said transmitting of said related data upon the storage capacity of said data storage device being reached.

6. An apparatus as in claim 1, wherein said processor is further adapted for initiating said transmitting of said related data upon request of said computer.

7. An apparatus as in claim 1, further comprising a display connected to said processor, said display being adapted for displaying messages for said person and prompts for assisting said person in performing said entering.

8. An apparatus as in claim 7, wherein said display comprises an LCD.

9. An apparatus as in claim 1, wherein said data input device comprises a keypad.

10. An apparatus as in claim 8, wherein said data input device comprises a touch-sensitive screen incorporated into said LCD.

11. An apparatus as in claim 1, wherein said data input device comprises a wireless electronic communication device.

12. An apparatus as in claim 1, wherein said data interface device comprises a wireless modem.

13. An apparatus as in claim 1, wherein said geographical locating device comprises a global positioning system (GPS) receiver.

14. An apparatus as in claim 1, wherein said geographical locating device comprises a cellular transmitter/receiver.

15. An apparatus as in claim 1, wherein said power source comprises a rechargeable battery.

16. An apparatus as in claim 1, further comprising a casing for housing said processor, said data storage device, said clock, said geographical locating device, said data interface device and said power source.

17. An apparatus as in claim 16, wherein said casing comprises a handle and a collapsible support affixed to a face of said casing for positioning said apparatus in an upright position on a flat surface.

18. An apparatus as in claim 16, further comprising a display connected to said processor, said display being adapted for displaying messages to said person and prompts for assisting said person in performing said entering and wherein said display forms a face of said casing.

19. An apparatus as in claim 18, wherein said data input device comprises a keypad and said keypad forms a face of said casing.

20. An apparatus as in claim 1, wherein said data interface device is further adapted for receiving from said computer for storage in said data storage device messages for said person associated with said identity.

21. An apparatus as in claim 20, further comprising a display connected to said processor and wherein said messages are displayed on said display.

22. A self-contained, portable time and attendance recording apparatus, comprising:

a processor;

a data storage device connected to said processor;

a data input device connected to said processor, said data input device being adapted for entering attendance data by a person indicating the identity of said person and that said person is clocking into or out of a worksite, said data input device being further adapted for transmitting said attendance data to said processor;

a clock connected to said processor, said clock being adapted for providing the time and date of said entering to said processor;

a biometric-capture device connected to said processor, said biometric-capture device being adapted for capturing a biometric characteristic of said person, said processor being adapted to associate said attendance data, said time and date and said biometric characteristic with each other as related data and to store said related data in said storage device;

a data interface device adapted for transmitting said related data through a communication network to a computer on said network; and

a power source adapted to provide power to said processor, said data storage device, said data input device,

said clock, said biometric-capture device and said data interface.

23. An apparatus as in claim 22, further comprising a geographical locating device connected to said processor, said geographical locating device being adapted for providing the geographical location of said apparatus to said processor, said processor being further adapted for associating said geographical location with said related data and said data interface device being further adapted for transmitting said geographical location with said related data through said communication network to said computer.

24. An apparatus as in claim 22, wherein said biometric-capture device comprises a digital camera and said biometric characteristic is a visual image of said person.

25. An apparatus as in claim 22, wherein said data storage device is adapted for storing indicia identifying said worksite and a company employing said person, said processor is adapted for associating said indicia with said related data and said data interface device is adapted for transmitting said indicia with said related data through said communication network to said computer.

26. An apparatus as in claim 22, wherein said processor is further adapted for initiating said transmitting of said related data upon the storage capacity of said data storage device being reached.

27. An apparatus as in claim 22, wherein said processor is further adapted for initiating said transmitting of said related data upon request of said computer.

28. An apparatus as in claim 22, further comprising a display connected to said processor, said display being adapted for displaying messages for said person and prompts for assisting said person in performing said entering.

29. An apparatus as in claim 28, wherein said display comprises an LCD.

30. An apparatus as in claim 22, wherein said data input device comprises a keypad.

31. An apparatus as in claim 29, wherein said data input device comprises a touch-sensitive screen incorporated into said LCD.

32. An apparatus as in claim 22, wherein said data input device comprises a wireless electronic communication device.

33. An apparatus as in claim 22, wherein said data interface device comprises a wireless modem.

34. An apparatus as in claim 23, wherein said geographical locating device comprises a global positioning system (GPS) receiver.

35. An apparatus as in claim 23, wherein said geographical locating device comprises a cellular transmitter/receiver.

36. An apparatus as in claim 22, wherein said power source comprises a rechargeable battery.

37. An apparatus as in claim 22, further comprising a casing for housing said processor, said data storage device, said clock, said biometric-capture device, said data interface device and said power source.

38. An apparatus as in claim 37, wherein said casing comprises a handle and a collapsible support affixed to a face of said casing for positioning said apparatus in an upright position on a flat surface.

39. An apparatus as in claim 37, further comprising a display connected to said processor, said display being adapted for displaying messages to said person and prompts for assisting said person in performing said entering and wherein said display forms a face of said casing.

40. An apparatus as in claim 39, wherein said data input device comprises a keypad and said keypad forms a face of said casing.

41. An apparatus as in claim 22, wherein said data interface device is further adapted for receiving from said computer for storage in said data storage device messages for said person associated with said identity.

42. An apparatus as in claim 41, further comprising a display connected to said processor and wherein said messages are displayed on said display.

43. A self-contained, portable time and attendance recording apparatus, comprising:

a processor;

a data storage device connected to said processor;

a data input device connected to said processor, said data input device being adapted for entering attendance data by a person indicating the identity of said person and that said person is clocking into or out of a worksite, said data input device being further adapted for transmitting said attendance data to said processor;

a clock connected to said processor, said clock being adapted for providing the time and date of said entering to said processor;

a biometric-capture device connected to said processor, said biometric-capture device being adapted for capturing a biometric characteristic of said person and providing said characteristic to said processor;

a geographical locating device connected to said processor, said geographical locating device being adapted for providing the geographical location of said apparatus to said processor, said processor being adapted to store said attendance data, said time and date and said

biometric characteristic in said storage device and to associate said attendance data, said time and date, said biometric characteristic and said geographical location with each other as related data;

a data interface device adapted for transmitting said related data through a communication network to a computer on said network; and

a power source adapted to provide power to said processor, said data storage device, said data input device, said clock, said biometric-capture device, said geographical locating device and said data interface.

44. An apparatus as in claim 43, wherein said biometric-capture device comprises a digital camera and said biometric characteristic is a visual image of said person.

45. An apparatus as in claim 43, wherein said data storage device is adapted for storing indicia identifying said worksite and a company employing said person, said processor is adapted for associating said indicia with said related data and said data interface device is adapted for transmitting said indicia with said related data through said communication network to said computer.

46. An apparatus as in claim 43, wherein said processor is further adapted for initiating said transmitting of said related data upon the storage capacity of said data storage device being reached.

47. An apparatus as in claim 43, wherein said processor is further adapted for initiating said transmitting of said related data upon request of said computer.

48. An apparatus as in claim 43, further comprising a display connected to said processor, said display being adapted for displaying messages for said person and prompts for assisting said person in performing said entering.



49. An apparatus as in claim 48, wherein said display comprises an LCD.

50. An apparatus as in claim 43, wherein said data input device comprises a keypad.

51. An apparatus as in claim 49, wherein said data input device comprises a touch-sensitive screen incorporated into said LCD.

52. An apparatus as in claim 43, wherein said data input device comprises a wireless electronic communication device.

53. An apparatus as in claim 43, wherein said data interface device comprises a wireless modem.

54. An apparatus as in claim 43, wherein said geographical locating device comprises a global positioning system (GPS) receiver.

55. An apparatus as in claim 43, wherein said geographical locating device comprises a cellular transmitter/receiver.

56. An apparatus as in claim 43, wherein said power source comprises a rechargeable battery.

57. An apparatus as in claim 43, further comprising a casing for housing said processor, said data storage device, said clock, said biometric-capture device, said geographical locating device, said data interface device and said power source.

58. An apparatus as in claim 57, wherein said casing comprises a handle and a collapsible support affixed to a face of said casing for positioning said apparatus in an upright position on a flat surface.

59. An apparatus as in claim 57, further comprising a display connected to said processor, said display being adapted for displaying messages to said person and prompts for

assisting said person in performing said entering and wherein said display forms a face of said casing.

60. An apparatus as in claim 59, wherein said data input device comprises a keypad and said keypad forms a face of said casing.

61. An apparatus as in claim 43, wherein said data interface device is further adapted for receiving from said computer for storage in said data storage device messages for said person associated with said identity.

62. An apparatus as in claim 61, further comprising a display connected to said processor and wherein said messages are displayed on said display.

63. A method for recording and verifying time and attendance data entered by employees at a worksite, comprising providing at a worksite a portable time and attendance recording apparatus, said recording apparatus comprising a data storage device, a data input device, a clock, a geographical locating device and a data interface device;

receiving on said recording apparatus attendance data entered by a person on said data input device indicating the identity of said person and that said person is clocking into or out of said worksite;

determining from said clock the time and date of said entering;

determining from said geographical locating device the geographical location of said recording apparatus;

storing said attendance data and said time and date in said storage device;

associating said attendance data and said time and date with each other and with said geographical location as related data;

transmitting said related data from said data interface device through a communication network to a first computer on said network remote from said geographical location.

64. A method as in claim 63, further comprising obtaining access to said first computer from a second computer on said network and verifying said related data, including said geographical location, from said second computer.

65. A method as in claim 64, wherein said recording apparatus further comprises a biometric-capture device for capturing a biometric characteristic of said person and said first computer contains a database storing a reference for said biometric characteristic, and further comprising capturing on said biometric-capture device said biometric characteristic, storing said biometric characteristic in said storage device, associating said biometric characteristic with said related data, transmitting said biometric characteristic with said related data from said data interface device through said communication network to said first computer and comparing from said second computer said biometric characteristic with said reference to verify said biometric characteristic.

66. A method as in claim 65, wherein said biometric-capture device comprises a digital camera, said biometric characteristic is a visual image of said person and said reference for said characteristic is a photograph of said person taken prior to said capturing.

67. A method as in claim 63, further comprising storing indicia identifying said worksite and a company employing said person in said data storage device, associating said indicia with said related data and transmitting said indicia with said related data from said data interface device through said communication network to said first computer.

68. A method as in claim 63, further comprising initiating said transmitting of said related data upon the storage capacity of said data storage device being reached.

69. A method as in claim 63, further comprising initiating said transmitting of said related data upon request of said computer.

70. A method as in claim 63, wherein said recording apparatus further comprises a display, and further comprising displaying on said display messages for said person and prompts for assisting said person in performing said entering.

71. A method as in claim 70, wherein said display comprises an LCD.

72. A method as in claim 63, wherein said data input device comprises a keypad.

73. A method as in claim 71, wherein said data input device comprises a touch-sensitive screen incorporated into said LCD.

74. A method as in claim 63, wherein said data input device comprises a wireless electronic communication device.

75. A method as in claim 63, wherein said data interface device comprises a wireless modem.

76. A method as in claim 63, wherein said geographical locating device comprises a global positioning system (GPS) receiver.

77. A method as in claim 63, wherein said geographical locating device comprises a cellular transmitter/receiver.

78. A method as in claim 70, wherein said first computer comprises a database and further comprising storing said messages in said database associated with said identity, transmitting said messages from said database through said communication network for storage in said data storage device

and retrieving said messages from said data storage device for said displaying.

79. A method as in claim 64, wherein said communication network comprises the Internet, said first computer is associated with an application service provider on said Internet and said second computer is associated with a company employing said person.

80. A method as in claim 66, wherein said comparing comprises displaying on a display associated with said second computer said visual image next to said photograph to enable an operator of said second computer to perform a visual comparison of said visual image and said photograph.

81. A method for recording and verifying time and attendance data entered by employees at a worksite, comprising providing at a worksite a portable time and attendance recording apparatus, said recording apparatus comprising a data storage device, a data input device, a clock, a biometric-capture device and a data interface device; receiving on said recording apparatus attendance data entered by a person on said data input device indicating the identity of said person and that said person is clocking into or out of said worksite;

determining from said clock the time and date of said entering;

capturing from said biometric-capture device a biometric characteristic of said person;

storing said attendance data, said time and date and said biometric characteristic in said storage device;

associating said attendance data, said time and date and said biometric characteristic with each other as related data;

transmitting said related data from said data interface device through a communication network to a first computer on said network remote from said worksite.

82. A method as in claim 81, further comprising obtaining access to said first computer from a second computer on said network and verifying said related data, including said biometric characteristic, from said second computer.

83. A method as in claim 82, wherein said recording apparatus further comprises a geographical locating device, and further comprising determining from said geographical locating device the geographical location of said recording apparatus, associating said geographical location with said related data, transmitting said geographical location with said related data from said data interface device through said communication network to said first computer and verifying from said second computer said geographical location.

84. A method as in claim 82, wherein said first computer contains a database storing a reference for said biometric characteristic and said verifying comprises comparing from said second computer said biometric characteristic with said reference.

85. A method as in claim 84, wherein biometric-capture device comprises a digital camera, said biometric characteristic is a visual image of said person and said reference for said characteristic is a photograph of said person taken prior to said capturing.

86. A method as in claim 81, further comprising storing indicia identifying said worksite and a company employing said person in said data storage device, associating said indicia with said related data and transmitting said indicia with said related data from said data interface device through said communication network to said first computer.

87. A method as in claim 81, further comprising initiating said transmitting of said related data upon the storage capacity of said data storage device being reached.

88. A method as in claim 81, further comprising initiating said transmitting of said related data upon request of said computer.

89. A method as in claim 81, wherein said recording apparatus further comprises a display, and further comprising displaying on said display messages for said person and prompts for assisting said person in performing said entering.

90. A method as in claim 89, wherein said display comprises an LCD.

91. A method as in claim 81, wherein said data input device comprises a keypad.

92. A method as in claim 90, wherein said data input device comprises a touch-sensitive screen incorporated into said LCD.

93. A method as in claim 81, wherein said data input device comprises a wireless electronic communication device.

94. A method as in claim 81, wherein said data interface device comprises a wireless modem.

95. A method as in claim 83, wherein said geographical locating device comprises a global positioning system (GPS) receiver.

96. A method as in claim 83, wherein said geographical locating device comprises a cellular transmitter/receiver.

97. A method as in claim 89, wherein said first computer comprises a database and further comprising storing said messages in said database associated with said identity, transmitting said messages from said database through said communication network for storage in said data storage device

and retrieving said messages from said data storage device for said displaying.

98. A method as in claim 82, wherein said communication network comprises the Internet, said first computer is associated with an application service provider on said Internet and said second computer is associated with a company employing said person.

99. A method as in claim 85, wherein said comparing comprises displaying on a display associated with said second computer said visual image next to said photograph to enable an operator of said second computer to perform a visual comparison of said visual image and said photograph.

100. A method for recording and verifying time and attendance data entered by employees at a worksite, comprising providing at a worksite a portable time and attendance recording apparatus, said recording apparatus comprising a data storage device, a data input device, a clock, a biometric-capture device, a geographical locating device and a data interface device;

receiving on said recording apparatus attendance data entered by a person on said data input device indicating the identity of said person and that said person is clocking into or out of said worksite;

determining from said clock the time and date of said entering;

capturing from said biometric-capture device a biometric characteristic of said person;

determining from said geographical locating device the geographical location of said recording apparatus;

storing said attendance data, said time and date and said biometric characteristic in said storage device;



associating said attendance data, said time and date, said biometric characteristic and said geographical location with each other as related data;

transmitting said related data from said data interface device through a communication network to a first computer on said network remote from said geographical location.

101. A method as in claim 100, further comprising obtaining access to said first computer from a second computer on said network and verifying said related data, including said biometric characteristic and said geographical location, from said second computer.

102. A method as in claim 101, wherein said first computer contains a database storing a reference for said biometric characteristic and said verifying comprises comparing from said second computer said biometric characteristic with said reference.

103. A method as in claim 102, wherein biometric-capture device comprises a digital camera, said biometric characteristic is a visual image of said person and said reference for said biometric characteristic is a photograph of said person taken prior to said capturing.

104. A method as in claim 100, wherein said recording apparatus further comprises a display, and further comprising displaying on said display messages for said person and prompts for assisting said person in performing said entering.

105. A method as in claim 104, wherein said display comprises an LCD.

106. A method as in claim 100, wherein said data input device comprises a keypad.

107. A method as in claim 105, wherein said data input device comprises a touch-sensitive screen incorporated into said LCD.

108. A method as in claim 100, wherein said data input device comprises a wireless electronic communication device.

109. A method as in claim 100, wherein said data interface device comprises a wireless modem.

110. A method as in claim 100, wherein said geographical locating device comprises a global positioning system (GPS) receiver.

111. A method as in claim 100, wherein said geographical locating device comprises a cellular transmitter/receiver.

112. A method as in claim 104, wherein said first computer comprises a database and further comprising storing said messages in said database associated with said identity, transmitting said messages from said database through said communication network for storage in said data storage device and retrieving said messages from said data storage device for said displaying.

113. A method as in claim 101, wherein said communication network comprises the Internet, said first computer is associated with an application service provider on said Internet and said second computer is associated with a company employing said person.

114. A method as in claim 103, wherein said comparing comprises displaying on a display associated with said second computer said visual image next to said photograph to enable an operator of said second computer to perform a visual comparison of said visual image and said photograph.